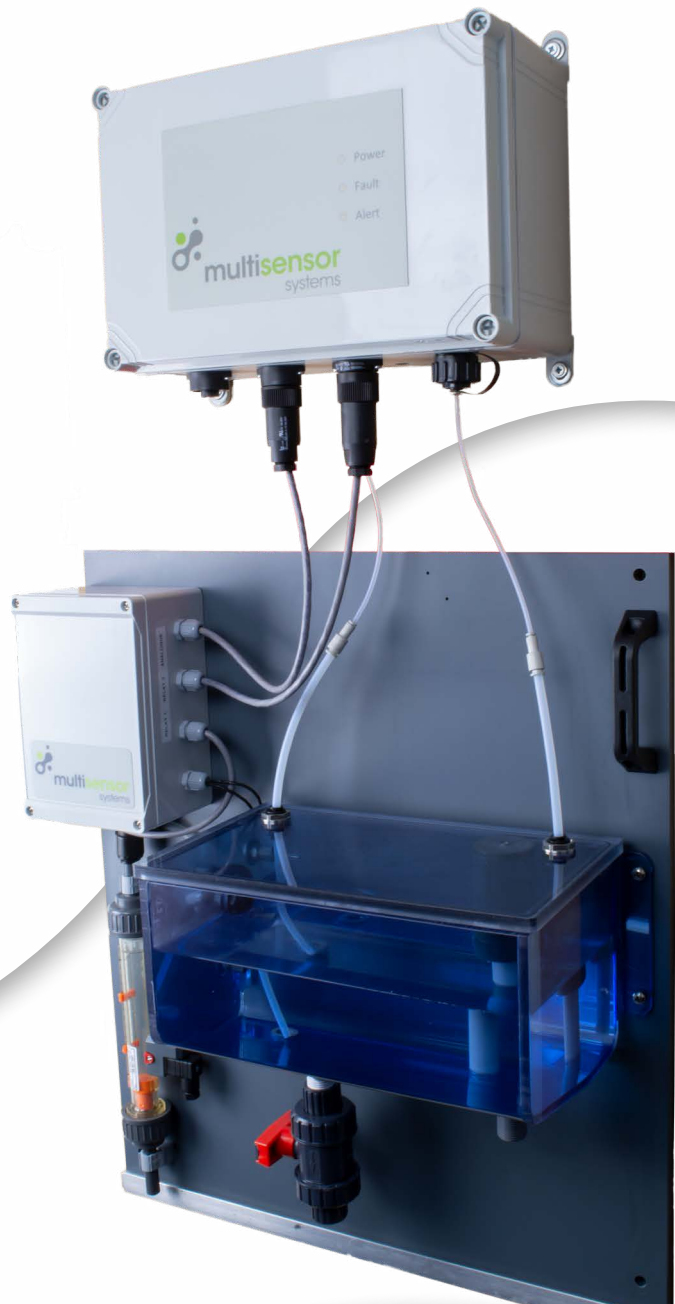


# Industrial Effluent and Process Water Analyzer

## MS1900



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Monitoring industrial water for complete security



The MS1900 is an **industrial water analyzer** designed to monitor the outflows from industrial facilities, water in industrial processes and to detect fuels and other VOCs in drains and waste water networks.

The instrument works by sensing gases or volatiles to provide a non-contact measurement system with very **low maintenance** requirements.

Taking a measurement every 2 seconds, the MS1900 is accurate in concentrations up to 10 ppm in water\* and its very **wide dynamic range** allows it to be used in a variety of environments.

A **user programmable** concentration alarm threshold can be set, connecting to a relay output and an indicator on the front panel. This allows connection to other peripheral equipment such as isolation valves, pumps, samplers or audio-visual alarms.

A 4–20 mA output is available for connection to a PLC or SCADA system.

The MS1900 can operate from 90–240 V AC or 12 V DC power supplies.

- ✓ Continuous monitoring
- ✓ Low operating and maintenance costs
- ✓ High reliability
- ✓ No reagents
- ✓ Field proven technology

\*Toluene at 20 °C / 68 °F



## Applications

- Monitoring of industrial **drains** and discharges
- Monitoring of process water
- Storm water measurement
- **Oil and Fuel Leak** Detection
- Detection of **VOCs in wastewater systems**

## Installation

Installation is a **simple process** and consists of connecting the instrument to power and the water source to be monitored. Setup uses a user friendly app running on a laptop PC.

## CASE STUDY

### Industrial Effluent: The Problem

**Discharge of VOCs** into wastewater is an endemic problem in engineering, chemical processing, food and beverage production and other industrial processes.

Spills can lead to **illegal discharges, pollution, fines and negative PR.**

### The Consequences

Following a spill the customer was **prosecuted** by the Environment Agency resulting in financial penalties and negative publicity.

Moreover the **cost of restoration** and remediation of the environment was extremely high for which the company was liable.

### The Solution

By installing the **MS1900 Industrial Effluent and Process Water Analyzer** at the outflow of the plant, the customer is provided data as soon as the contamination starts to increase and is able to take appropriate action, avoiding all the problems associated with an unexpected pollution event.

The MS1900 utilizes a **contactless measurement** technique that means:

- ✓ It does not need reagents
- ✓ Requires little maintenance
- ✓ It is robust and reliable
- ✓ It is cost effective



## TECHNICAL SPECIFICATION

PARAMETER		OPERATIONAL REQUIREMENTS		NOTES
		Minimum	Maximum	
Supply Voltage	AC Version	90 V AC	240 V AC	50 Hz or 60 Hz
	DC Version	10 V DC	15 V DC	
Power Consumption		9 W		Typical 7 W during operation
Working Temp: Ambient		0 °C / 32 °F	50 °C / 122 °F	Higher temperature available
Sampling Period		Continuous measurement		
Instrument Case		IP67 / NEMA 6		Polycarbonate
Detection Range		100 ppb	10 ppm	Measured against Toluene standard. For calibration using other compounds contact Multisensor Systems
Accuracy		-15%	+15%	1 ppm sample measured using standard 1.5 l solution (Water plus Toluene dissolved in DMSO) in glass 2.5 l Winchester type bottle using magnetic stirrer at 20 °C / 68 °F
Analogue Output		4 mA	20 mA	Scalable to range required, max load 900 Ω
Analogue Output Isolation		400 V DC		
Relay Voltage		50 V		Alarm and Fault Relays with NO and NC contacts
Relay Current		5 A		
User Interface		USB-A to PC		Using Multisensor Software provided
Data Storage		µSD Card		Instrument lifetime data stored
Instrument Weight		5 kg / 11 lbs		
Instrument Dimensions		300 x 200 x 132 mm 11.8 x 7.8 x 5.2 inches		
Sampling System Capacity		3 liters 0.8 US gal		
Sampling Sys. Dimensions		570 x 490 mm 22.4 x 19.2 inches		
Sampling Sys. Weight		12 kg / 26.4 lbs		
Water Flow Rate		2 liters per minute 0.52 US gpm		
Water Temperature		1 °C / 34 °F	40 °C / 104 °F	

### Typical Target Substances

Kerosene	Diesel	Acetone	Heptane	Methanol
Ethanol	Toluene	Xylene	Benzene	Mercaptan

### Consumables

Every 6 Months:	Air Filters
Every 12 Months:	Air Pump

### Authorised Distributor

**MTS** *Let's Flow Together*  
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